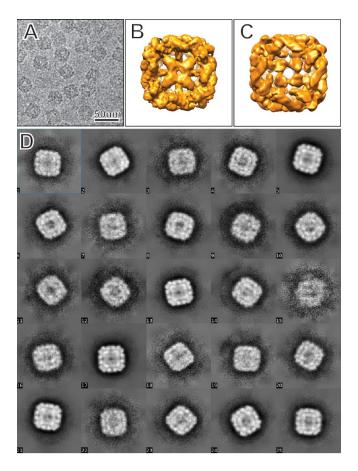
## **Supplementary Information**



**Figure S1.** Cryo-electron microscopy of AbmR complex. We have successfully purified AbmR complexes and prepared vitreously frozen specimens, as shown in **(A)**, suitable for cryo-electron tomography or single particle analysis. Subtomogram averaging has yield a density map displaying an architecture of a hollow cubic cage as shown in **(B)**. 2D-class averages of displayed image features agree that the complex is in a hollow cubic architecture **(D)**. Our single particle analysis has reached a structural map at a resolution about 10Å **(C)**. Major structural features agree with each other between the independent studies by single particle analysis **(C)** and by cryo-electron tomography and subvolum-averaging **(B)**